

Translation

PATENT COOPERATION TREATY

PCT/JP2003/011089



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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference<br>FNB357PCT  | <b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |  |
| International application No.<br>PCT/JP2003/011089  | International filing date ( <i>day/month/year</i> )<br>29 August 2003 (29.08.2003)  | Priority date ( <i>day/month/year</i> )<br>30 August 2002 (30.08.2002) |
| International Patent Classification (IPC) or national classification and IPC<br>F42B 3/12, B60R 22/46, 21/26, B01J 7/00, F23Q 13/00 |   |  |
| Applicant<br>NIPPON KAYAKU KABUSHIKI KAISHA   |   |  |

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| 1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.  |
| 2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.<br><br><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).<br><br>These annexes consist of a total of <u>2</u> sheets.  |
| 3. This report contains indications relating to the following items:<br><br>I <input checked="" type="checkbox"/> Basis of the report<br>II <input type="checkbox"/> Priority<br>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability<br>IV <input type="checkbox"/> Lack of unity of invention<br>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement<br>VI <input type="checkbox"/> Certain documents cited<br>VII <input type="checkbox"/> Certain defects in the international application<br>VIII <input type="checkbox"/> Certain observations on the international application |

|   |   |
|---|---|
| Date of submission of the demand<br>22 December 2003 (22.12.2003) | Date of completion of this report<br>28 April 2004 (28.04.2004) |
| Name and mailing address of the IPEA/JP                           | Authorized officer  |
| Facsimile No.   | Telephone No.   |

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP2003/011089

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed
- ☒ the description:  
pages 1-15, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
pages 2, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages 1, 4-10, filed with the letter of 31 March 2004 (31.03.2004)
- ☒ the drawings:  
pages 1-4, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☒ the claims, Nos. 3
- ☐ the drawings, sheets/fig \_\_\_\_\_

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

|                               |        |            |     |
|-------------------------------|--------|------------|-----|
| Novelty (N)                   | Claims | 1, 2, 4-10 | YES |
|                               | Claims |            | NO  |
| Inventive step (IS)           | Claims |            | YES |
|                               | Claims | 1, 2, 4-10 | NO  |
| Industrial applicability (IA) | Claims | 1, 2, 4-10 | YES |
|                               | Claims |            | NO  |

**2. Citations and explanations**

Document 1: US 5290060 A1 (Morton International, Inc.), 1 March 1994

Document 2: JP 9-169254 A (Nippon Kayaku Co., Ltd.), 30 June 1997

Document 3: JP 7-232613 A (Nippon Kayaku Co., Ltd.), 5 September 1995

Document 4: JP 2001-225711 A (Daicel Chemical Industries, Ltd.), 21 August 2001

Document 5: JP 7-232989 A (Nippon Kayaku Co., Ltd.), 5 September 1995

Document 6: US 5380380 A1 (Automotive Systems Laboratory, Inc.), 10 January 1995

Document 7: JP 2001-80986 A (Nippon Kayaku Co., Ltd.), 27 March 2001

Document 8: JP 10-325699 A (Nichu Giken Kogyo Kabushiki Kaisha), 8 December 1998

Document 9: JP 9-504599 A (Quantic Industries Incorporated), 6 May 1997

Documents 1, 2, 3 and 4 set forth a gas generator, having an automatic ignition layer inside a cup body.

Documents 5, 6 and 7 also disclose a feature relating to automatic igniting agent in a gas generator.

Moreover, as described in document 8 (paragraphs

[0014] and [0030], etc.) and document 9 (page 30, line 18 to page 31, etc.), an ignition device, wherein an igniting agent or the like is deposited in liquid form in a member such as a cup or header before being dried to fix in place, is a known feature, and it would be easy for a person skilled in the art to conceive of applying said known feature to the automatic igniting agent in a cup body described in documents 1, 2, 3 and 4.